

REMARKS

Claims 1-8 have been rejected and remain pending. Claims 1, 4-6, and 8 have been amended herein. Claim 1 has been amended to replace the phrase "the surface bound growth factor" with the phrase "said growth factor displayed on the surface of said retroviral packaging cell." Claim 1 also has been amended to recite "said quiescent cell" as opposed to "said cell." Claim 4 has been amended to indicate that the retroviral packaging cell displays the growth factor on its surface. Claims 5 and 6 have been amended to recite a "fusion protein" as suggested by the Examiner. Also, claim 6 has been amended to depend from claim 1 as opposed to claim 5. Claim 8 has been amended to indicate that the retroviral packaging cell displays the growth factor on its surface. No new matter has been added by these amendments.

In light of these amendments and the following remarks, Applicants respectfully request allowance of claims 1-8.

Attorney Docket Number

Applicants respectfully request that the Examiner replace the current Attorney Docket Number MEWB112010 with 07039-411US1.

Examiner Interview

Applicants' agent thanks Examiner Shukla for the courtesy of the telephonic interview on March 3, 2003. The substance of this telephonic interview involved the rejections and amendments presented herein.

Rejections under 35 U.S.C. § 112, second paragraph

The Examiner rejected claims 1-8 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Examiner stated that there is insufficient antecedent basis for the "the surface bound growth factor" and "said cells" limitations in claim 1. The Examiner also stated that claims 4 and 8 are vague and indefinite because it is unclear as to which retroviral packaging cell the term "said retroviral packaging cell" refers to; the cell before expression of the growth factor or the cell after the expression of the growth factor. In addition, the Examiner

stated that claims 5 and 6 are vague and indefinite, suggesting the use of the term "fusion protein" instead of the term "a fusion." Lastly, the Examiner stated that claim 6 is indefinite since claim 6 recites the broad recitation of a viral envelope protein, while claim 5 on which this claim is dependent recites a retroviral envelope protein, which is a narrower statement of the range/limitation.

Applicants respectfully disagree. A person having ordinary skill in the art would have understood the meaning of the previously presented claims.

To further prosecution, however, claim 1 has been amended herein to replace the phrase "the surface bound growth factor" with the phrase "said growth factor displayed on the surface of said retroviral packaging cell." Claim 1 also has been amended to recite "said quiescent cell" as opposed to "said cell." Thus, claim 1 as amended is clear and unambiguous.

In addition, claims 4 and 8 have been amended to indicate that the retroviral packaging cell displays the growth factor on its surface, while claim 5 and 6 have been amended as suggested by the Examiner to recite a "fusion protein." Also, claim 6 has been amended to depend from claim 1 as opposed to claim 5. A person having ordinary skill in the art at the time Applicants filed would have understood the meaning of the presently amended claims. Thus, the presently claimed invention is clear and unambiguous.

In light of the above, Applicants respectfully request withdrawal of the rejection of claims 1-8 under 35 U.S.C. §112, second paragraph.

CONCLUSION

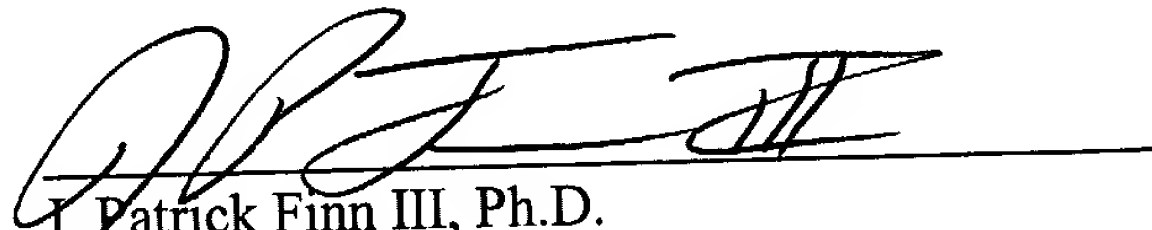
Applicants submit that claims 1-8 are in condition for allowance, which action is requested. The Examiner is invited to call the undersigned agent at the telephone number below if such will advance prosecution of this application. Attached is a marked-up version of the

Applicant : Russell et al.
Serial No. : 09/043,665
Filed : October 5, 1998
Page : 5

changes being made by the current amendment. The Commissioner is authorized to charge any fees or credit any overpayments to Deposit Account No. 06-1050.

Respectfully submitted,

Date: March 3, 2003


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Applicant : Russell et al.
 Serial No. : 09/043,665
 Filed : October 5, 1998
 Page : 6



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Version with markings to show changes made

In the claims:

Claims 1, 4-6, and 8 have been amended as follows:

1. (Amended) A method of transforming a quiescent cell with a nucleic acid encoding a polypeptide, the method comprising:

exposing said quiescent cell in vitro to a retroviral packaging cell, said retroviral packaging cell comprising a retroviral vector and an exogenous nucleic acid encoding a growth factor, wherein said growth factor is displayed on the surface of said retroviral packaging cell, wherein said retroviral vector comprises said nucleic acid encoding said polypeptide, and wherein said growth factor displayed on the surface of said retroviral packaging cell [the surface bound growth factor] induces said quiescent cell to divide, so that the nucleic acid encoding said polypeptide can incorporate into the genome of said quiescent cell.

4. (Amended) The method of claim 1 wherein said retroviral packaging cell displaying said growth factor on its surface displays multiple growth factors.

5. (Amended) The method of claim 1 wherein said growth factor is expressed as an N-terminal fusion protein with a retroviral envelope protein.

6. (Amended) The method of claim 1 [5] wherein said growth factor is expressed as a fusion protein with a viral envelope protein and is fused to the envelope protein via a cleavable linker.

8. (Amended) The method of claim 1 wherein said retroviral packaging cell displaying said growth factor on its surface further expresses nucleic acid encoding a receptor to target the retroviral packaging cell [cells] to the bone marrow and/or an immunosuppressive factor so that

Applicant : Russell et al.
Serial No. : 09/043,665
Filed : October 5, 1998
Page : 7

Attorney's Docket No.: 07039-411US1

the receptor and/or immunosuppressive factor are displayed on the cell surface of said retroviral packaging cell.